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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,293	11/12/2001	Daniel H. Walker	ITT-485-A	5056

7590 11/17/2005

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EXAMINER	
FIGUEROA, FELIX O	

ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H-A

Office Action Summary	Application No.	Applicant(s)	
	10/010,293	WALKER ET AL.	
	Examiner	Art Unit	
	Felix O. Figueroa	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-9,12,31,32,34,35 and 38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-9,12,31,32,34,35 and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/02/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 2, 2005 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-7, 9, 12, 31, 32, 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda (JP 2001-074180) in view of Kimura et al. (JP 2001-141170).

Suda discloses a fluid quick connector comprising: an electrically conductive connector housing (9) configured to mate with an end-form (4) having a bore extending from one end; an electrically conductive contact member (18) mounted in the housing and contacting the end-form to electrically connect the end-form and the quick connector housing, the contact member including: a first portion mounted in the quick connector housing bore in contact with the quick connector housing.

Suda discloses substantially the claimed invention except for the contact member having an arm. Kimura teaches a contact member (4, Fig.3) having a first portion (45) and an arm (at 44) extending from the first portion and having a bent end extending through the open end of the bore in the end-form (1) into contact with an inner surface of the end-form, the arm and the bent end including: a beam portion extending from the first portion of the contact member; a reverse tapered surface extending angularly from the beam portion; and a tip end extending angularly from an edge at one end of the reverse tapered surface and defining a lead-in surface engaged by a tip end of the end-form, thus providing an efficient and reliable connection with the end-form. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a contact member with an arm, as taught by Kimura, to provided an efficient and reliable connection with the end-form.

Regarding claim 6, Kimura discloses the reverse tapered surface extending at an obtuse included angle with respect to the beam, and the tip end extending at an obtuse included angle with the back taper face.

Regarding claim 7, Suda discloses a fluid quick connector comprising: an electrically conductive connector housing (9) having a bore extending from one end; an end-form (4) having a bore extending from an open end, the open end of the end-form inserted into the bore in the housing; and an electrically conductive contact member (18) mounted in the housing and contacting the end-form to electrically connect the end-form and the quick connector housing, the contact member including: a first portion

mounted in the bore of the connector housing in contact with the housing the first portion including a tubular body mounted in the bore in the housing.

Suda discloses substantially the claimed invention except for the contact member having an arm. Kimura teaches a contact member (4, Fig.3) having a first portion (45) and an arm (at 44) extending from one end of the tubular body and passing through the open end of the bore in the end-form into contact with an inner surface of the end-form (1), thus providing an efficient and reliable connection with the end-form. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a contact member with an arm, as taught by Kimura, to provided an efficient and reliable connection with the end-form.

Regarding claims 9 and 35, Suda discloses a fluid quick connector comprising: an electrically conductive connector housing (9) configured to mate with an end-form (4) having a bore extending from one end; and an electrically conductive contact member (18) mounted in the housing and contacting the end-form to electrically connect the end-form and the quick connector housing, the contact member including: a tubular body mounted in the bore in the quick connector in contact with the quick connector housing, a second end oppositely formed from a first end of the body, a lead-in edge formed on the second end.

Suda discloses substantially the claimed invention except for the contact member having means for passing through an open end of the end-form. Kimura teaches a contact member (4, Fig.3) having a first portion (45) and an means, (at 44) extending from one end of the tubular body, for passage through the open end of the bore in the

end-form into contact with an inner surface of the end-form (1), thus providing an efficient and reliable connection with the end-form. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a contact member with means for passing through an open end of the end-form, as taught by Kimura, to provided an efficient and reliable connection with the end-form.

Regarding claims 12 and 38, Suda discloses a fluid quick connector comprising: an electrically conductive connector housing (9) configured to mate with an end-form (4) having a bore extending from one end; and an electrically conductive contact member (18) mounted in the housing and contacting the end-form to electrically connect the end-form and the quick connector housing, the contact member including: an annular ring mounted in the quick connector housing bore in contact with the quick connector housing.

Suda discloses substantially the claimed invention except for the contact member having means for passing through an open end of the end-form. Kimura teaches a contact member (4, Fig.3) having a first portion (45) and an means, (at least at one 44) extending from one end of the annular ring, for passage through the open end of the bore in the end-form into contact with an inner surface of the end-form (1); and at least one locating member (others of 44) extending angularly from the annular ring of the contact member, the at least one locating member engagable with the end of the end-form to center the annular ring relative to the male end-form, thus providing an efficient and reliable connection with the end-form. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a contact

member with means for passing through an open end of the end-form, as taught by Kimura, to provided an efficient and reliable connection with the end-form.

Regarding claim 31, Suda discloses a fluid quick connector comprising: an electrically conductive connector housing (9) having a bore extending from one end; an electrically conductive end-form (4) having a bore extending from an open end, the open end of the end-form inserted into the bore in the housing; and an electrically conductive contact member (18) mounted in the housing and contacting the end-form to electrically connect the end-form and the quick connector housing, the contact member including: a first portion mounted in the quick connector housing bore in contact with the quick connector housing.

Suda discloses substantially the claimed invention except for the contact member having an arm. Kimura teaches a contact member (4, Fig.3) having a first portion (45) and an arm (at 44) extending from the first portion and having a bent end extending through the open end of the bore in the end-form into contact with an inner surface of the end-form (1), the arm and the bent end including: a beam portion extending from the first portion of the contact member; a back taper surface extending angularly from the beam portion; and a tip end extending angularly from an edge at one end of the back taper surface and defining a lead-in surface engaged by a tip end of the end-form, thus providing an efficient and reliable connection with the end-form. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a contact member with an arm, as taught by Kimura, to provided an efficient and reliable connection with the end-form.

Regarding claim 32, Kimura discloses the back taper surface extending at an obtuse included angle with respect to the beam, and the tip end extending at an obtuse included angle with the back taper face.

Claims 8 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suda in view of Kimura et al. and Gale et al. (US 4,928,202).

Suda discloses a fluid quick connector comprising: an electrically conductive connector housing (9) configured to mate with an end-form (4) having a bore extending from one end; and an electrically conductive contact member (18) mounted in the housing and contacting the end-form to electrically connect the end-form and the quick connector housing, the contact member including: a tubular body mounted in the bore in the quick connector in contact with the quick connector housing. Suda discloses substantially the claimed invention except for the contact member having means for passing through an open end of the end-form. Kimura teaches a contact member (4, Fig.3) having a first portion (45) and an means, (at 44) extending from one end of the tubular body, for passage through the open end of the bore in the end-form into contact with an inner surface of the end-form (1), thus providing an efficient and reliable connection with the end-form. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to a contact member with means for passing through an open end of the end-form, as taught by Kimura, to provided an efficient and reliable connection with the end-form.

Suda, as modified, discloses substantially the claimed invention except for longitudinal split. Gale teaches the use of a longitudinal split (between 66 and 68). This

structure provides for a resilient and secure contacting with the housing. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the tubular body with a longitudinal split, as taught by Gale, to provide for a resilient and secure contacting with the housing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Felix O. Figueroa
Art Unit 2833